

DEEP N-WELL CAPACITOR

ABSTRACT

A deep n well capacitor. A deep n well is formed in an integrated circuit. The deep n well can be parasitically coupled to Vdd and ground. A reverse-biased diode depletion region forms between n type and p type material, creating a capacitor. The capacitor provides local, on-chip decoupling of power supplied to active transistor devices on the integrated circuit, enabling greater operating frequencies for the integrated circuit.